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TRI-PARTY AGREEMENT

Change Notice Number TPA-CN- 0790	TPA CHANGE NOTICE FORM	Date: 7/16/2017
Document Number, Title, and Revision: DOE/RL-2011-03, Removal Action Work Plan for the Deactivation, Decontamination, Decommissioning and Demolition of the Plutonium Finishing Plant Complex, Rev 1 1238095		Date Document Last Issued: March 2016
Approved Change Notices Against this Document: TPA-CN-0739, TPA-CN-0756, TPA-CN-780		
Originator: T.K Teynor		Phone: 509-376-6363

Description of Change:

Text has been modified to add the Waste Receiving and Processing Facility (WRAP) as a location where PFP waste can be stored to be consistent with language in DOE/RL-2005-13, Action Memorandum for the Plutonium Finishing Plant Above-Grade Structures Non-Time Critical Removal Action, Rev. 0.

T.K. Teynor and S.N. Schleif agree that the proposed change
DOE **Lead Regulatory Agency**
modifies an approved workplan/document and will be processed in accordance with the Tri-Party Agreement Action Plan, Section 9.0, Documentation and Records, and not Chapter 12.0, Changes to the Agreement.
Revise Sections 2.1.3.2, 2.1.3.3, 2.1.4.2, and 4.2 as shown on the attached pages.
Modifications are denoted by using ~~strikeout~~ to indicate deletions and double underline to indicate text additions.


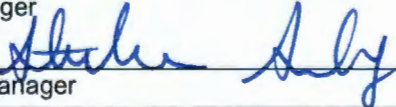
Note: Include affected page number(s): 2-3, 2-4, 2-9, 4-8

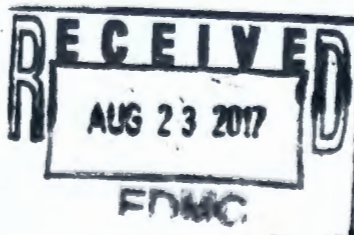
Justification and Impacts of Change:

The decision document for this removal action (DOE/RL-2005-13) identified WRAP as a location where PFP waste could be stored and managed until final disposition to the Waste Isolation Pilot Plant (WIPP). WRAP is suitable for storage of PFP waste and has the same regulatory status and capability as the Central Waste Complex (CWC). WRAP and CWC share a common boundary and are under the same management authority.

This change corrects an earlier omission that will make the Removal Action Work Plan consistent with the Action Memorandum. There is no impact due to this change.

Approvals:

T.K.Teynor		August 11, 2017	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved
DOE Project Manager		Date	
NA			<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved
EPA Project Manager		Date	
S.N. Schleif		8/14/17	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved
Ecology Project Manager		Date	



2.1.3.1 Above-Grade Deactivation

Deactivation activities to stage structures for final demolition will encompass all work performed to place the structure in a state where release of contaminants and risk to employees and the environment have been minimized to the extent practical, and will enable structure demolition and disposal. This work will be performed to ensure personnel and structure safety and may include isolating systems (i.e., electrical, mechanical, and chemical). Final demolition preparation will include removing final items previously required to support habitability (e.g., remaining instrumentation containing hazardous constituents, and asbestos containing doors), and applying fixatives and sealing penetrations through the floor.

All equipment and piping penetrating the floor will be cut or dismantled as close to the floor as possible and plugged. Operations involving radiological contaminants will be performed with personnel protection measures commensurate with the hazards anticipated. If work area monitoring shows the work environment is not as anticipated, work will be stopped to ensure adequate personnel protection. During the performance of activities where unknown radiological or other hazardous conditions exist, appropriate measures will be implemented to protect personnel and to reduce the risk of generating airborne contamination. Items identified as requiring special handling (cannot be rubblized) either will be removed during this phase of work or may be clearly color coded for intact removal after demolition has begun.

While deactivation activities are ongoing, systems and equipment may be left in an operational state to support S&M activities prior to the structure being demolished. These systems include electrical power, lighting, ventilation, and radiation monitoring. These items may be deactivated prior to demolition or deferred to structure demolition, as appropriate and needed. Each of the uncertainties known to exist for this removal action will be managed with pre-work surveys, physical/chemical/radiological characterization of the structure, walk-throughs, preventive control measures, analytical data, and in-depth planning (such as work packages and hazard reviews).

2.1.3.2 Below-Grade Deactivation

Below-grade areas of structures in the scope of this removal action will remain after completion of the removal action, but also will undergo deactivation to minimize potential release of contaminants, risk to employees, and the environment. Equipment, piping, or ducts in accessible below-grade areas will be characterized and removed or decontaminated as required. Items requiring removal (special handling) may be deferred for removal during demolition or during post-demolition activities and may require treatment and/or disposal at an approved offsite facility. For waste slated to go to the Waste Isolation Pilot Project (WIPP), the disposal pathway may entail storage at the Central Waste Complex (CWC), Waste Receiving and Processing Facility (WRAP), North Outside Storage Area awaiting off-site treatment, and/or shipment to another facility for treatment; then ultimately, shipment to WIPP in accordance with the schedule established for completing remedial actions on the Hanford Site. Any remaining plutonium in the below-grade areas must be verified not to pose a security risk or potential for criticality.

Piping that exits or enters a below-grade portion of structures will either be flushed or drained, cut or dismantled as close to the wall as possible, and plugged or capped.

After below-grade activities are complete, including final characterization, and as necessary to support planned demolition activities, below-grade voids may be filled to provide structural support.

Removal of the below-grade structures is not in the scope of this removal action and will be addressed in future CERCLA response actions.

2.1.3.3 Decontamination

After an area (i.e., some part of a structure) has been surveyed and the radiological conditions established, cleanup and general housekeeping will commence, as necessary. Cleanup and general housekeeping will

involve removing loose materials and rubble/debris, as well as loose radiological contamination as needed to facilitate demolition. If it is advantageous, these materials may be staged for removal during the demolition phase of the project.

The initial decontamination work scope is focused on removing the remaining internal equipment and debris from gloveboxes, hoods, operating areas, and ductwork; decontaminating the interior surfaces of gloveboxes; and packaging the internal equipment and debris for disposal. If the equipment/debris can be decontaminated to the extent it can meet the ERDF waste acceptance criteria, the equipment/debris will be disposed at ERDF or it may be left for disposal with the structure debris during demolition.

Gloveboxes, hoods, and other contaminated equipment (pipes such as transfer lines, vacuum lines and drains, ducts and filter boxes, and other components) that cannot be cleaned, decontaminated, or otherwise treated to meet ERDF waste acceptance criteria will require disposal at WIPP. The WIPP disposal pathway may entail storage at the CWC, WRAP, and/or shipment to another facility for treatment; then ultimately, shipment to WIPP in accordance with the schedule established for completing remedial actions on the Hanford Site.

If during excavations (e.g., to access utilities) the excavated soil is determined to be contaminated, the contaminated soil will be disposed at ERDF. Clean fill will be used to backfill the excavation.

The decontamination and stabilization activities include the following uncertainties:

- Personnel exposure to unexpected hazardous substances
- Inadvertent generation of high airborne contamination concentrations
- Unknown structural integrity of the structure and systems that could cause industrial accidents
- Depth of contaminant penetration into structure surfaces
- Common industrial risks associated with working in industrial areas and around heavy equipment
- Unknown conditions

Asbestos. Removal and disposal of asbestos and ACM will be performed in accordance with the substantive provisions of the *Clean Air Act of 1977* (40 CFR 61, "National Emission Standards for Hazardous Air Pollutants," hereinafter called NESHAP, Subpart M, "National Emission Standard for Asbestos") as identified in the Action Memorandum (DOE/RL-2005-13), which require special precautions to control airborne emissions of asbestos fibers during asbestos removal activities. Asbestos abatement activities will be performed in full compliance with all substantive NESHAP standards that are ARAR for the work. Prior to the commencement of the demolition, a thorough inspection of the affected structure will be performed and documented for the presence of asbestos, including Category I and Category II nonfriable ACM. All Category II nonfriable ACM will generally be presumed to be potentially friable and will be removed prior to the start of actual demolition activities. If DOE identifies any Category II ACM that should be allowed to remain in place during demolition based on the knowledge that the demolition will not render it friable, information identifying the planned demolition approach and describing how the Category II ACM will not become crumbled, pulverized, or reduced to powder by the forces expected to act on it during the demolition or otherwise friable, will be provided in advance to EPA for approval. Category I nonfriable ACM will also be removed prior to the start of actual demolition activities, except in situations where demolition practices will be used that can be or have been demonstrated to the satisfaction of EPA to not render the Category I ACM friable, consistent with NESHAP (40 CFR 61) standards. Demonstration can be performed using existing EPA or Washington State guidance regarding asbestos abatement under NESHAP (40 CFR 61). Such Category I nonfriable ACM must not be in poor condition and planned demolition activities must not subject the ACM to sanding, grinding, cutting, or abrading. In all cases, ACM that is either friable or cannot be demonstrated

ERDF Waste Acceptance Criteria and require disposition as TRU waste or may require treatment prior to transport to ERDF.

Each PFP above-grade structure will be demolished to within 15 cm (6 in.) of the slab and foundation. For structures with basements, tunnels, vaults, etc., the below-grade walls, as well as the below-grade slab and foundation will be left in place. These remaining portions of a structure are referred to in this document collectively as the slab. Equipment, piping, and ducts remaining in below-grade areas at the completion of the removal action would be characterized and documented to support future final remediation. Below-grade voids left by this work may be backfilled as needed, after any required sampling or surveys. In addition, miscellaneous debris in the surrounding area, such as fencing or telephone poles, will be removed and disposed of during demolition.

Demolition will result in piles of bulk demolition waste. This waste will be processed and loaded concurrently with demolition activities. These piles will be on or near the associated structure footprint and positioned to allow equipment access to the structure undergoing demolition and equipment access to the bulk waste.

During removal and demolition activities, if there are parts (areas, sections, etc.) of the slab that sustain damage that could allow contamination to enter into the environment, repairs of the slab are allowed. Repair work may include the use of concrete or other materials that would provide enough permanency to survive through the S&M period. Slabs associated with 236-Z and 242-Z will be removed and disposed (or staged at CWC, WRAP, or other appropriate 200 Area facility in WIPP-certifiable containers while awaiting final disposition) subsequent to completion of PFP selected disposition activities and after transition to S&M mode.

Underground Injection Control Devices (French drains) will be formally closed or stabilized prior to demolition activities to prevent demolition water intrusion. Removal of the top three feet of the French drain and backfill is required to meet formal closure. Removal may be accomplished prior to or during demolition activities. Formal closure may be deferred to final site remediation.

Wells may be located near or within the footprint of the structures undergoing demolition activities. The wells may or may not be affected by the demolition activities, but discussions with the affected groundwater groups or project must occur to ensure either proper well protection or decommissioning is performed. If required, the well or wells may be decommissioned prior to or as part of the demolition work.

2.1.4.3 Equipment Decontamination

Decontamination that is necessary to allow removal of demolition equipment from contamination areas, and waste truck decontamination, will be accomplished using standard industry practices and best management practices (BMPs).

Gross equipment decontamination methods will be employed to remove loose contamination within the contamination area. Gross cleaning and/or decontamination of heavy equipment and vehicles may consist of using wipes and nonhazardous materials to remove loose contamination. Water may be used to clean equipment in the decontamination area; however, the use of large volumes of water will be minimized. Soaps, detergents, or other nonhazardous cleaning agents may be added to the water used in the high-pressure washer. Pressure washing, if required, will normally be performed using cold water. However, hot water may be used to avoid icing. Wet grit blasting, grinding, or steam cleaning will be used only after other decontamination methods prove to be ineffective.

Additional or final decontamination may take place in the contamination reduction zone using the same or similar methods. Location and characterization of all decontamination areas will be documented after use.

1 criteria and would be considered "onsite"¹ for management and/or disposal of waste from activities
2 addressed in this document.

3
4 The identification, storage, treatment, and disposal of hazardous waste and the hazardous component of
5 mixed waste are governed by RCRA. Authority to implement most of the RCRA was delegated to the
6 State of Washington, which implements RCRA requirements under WAC 173-303. The dangerous waste
7 standards for generation and storage will apply to the management of any dangerous or mixed waste
8 generated under this removal action. Treatment standards for dangerous or mixed waste subject to RCRA
9 land disposal restrictions are specified in WAC 173-303-140, "Land Disposal Restrictions," which
10 incorporates 40 CFR 268, "Land Disposal Restrictions," by reference.

11 The management and disposal of PCB wastes are governed by the *Toxic Substances Control Act of 1976*
12 (TSCA), which is implemented by 40 CFR 761, "Polychlorinated Biphenyls (PCBs) Manufacturing,
13 Processing, Distribution in Commerce, and Use Prohibitions." The TSCA regulations contain specific
14 provisions for PCB waste, including PCB waste that contains a radioactive component. PCBs are also
15 considered underlying hazardous constituents under RCRA and, thus, may be subject to
16 WAC 173-303-140 and 40 CFR 268 requirements.

17 LLW that meets ERDF acceptance criteria will be disposed at ERDF, which is engineered to meet
18 appropriate performance standards under 10 CFR 61, "Licensing Requirements for Land Disposal of
19 Radioactive Waste." For waste slated to go to WIPP, the disposal pathway may entail storage at ~~the~~ CWC,
20 WRAP, North Outside Storage Area awaiting off-site treatment, and/or shipment to another facility for
21 treatment; then ultimately, shipment to WIPP in accordance with the schedule established for completing
22 remedial actions at the Hanford Site. WIPP meets 40 CFR 191, "Environmental Radiation Protection
23 Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive
24 Wastes," requirements for TRU waste disposal and is a RCRA-permitted disposal facility. ERDF and the
25 North Outside Storage Area are considered on-site for the purposes of CERCLA for management, storage,
26 and/or disposal of waste from this removal action. The suitability of the receiving TSD facility to manage
27 CERCLA waste that must be sent off the PFP CERCLA Site will be determined by the EPA regional office
28 overseeing the receiving TSD facility in accordance with 40 CFR 300.440. Treatment of waste (on-site or
29 off-site) may be necessary prior to disposal at ERDF, and containerized waste may be returned from off-site
30 segregation or treatment for disposal at ERDF. PFP generated TRU mixed waste will be stored at CWC. It
31 is anticipated that up to 75 1800 cubic foot top loading (1800TL) containers of TRU waste will be stored at
32 the North Outside Storage Area until the waste can be repackaged to meet WIPP acceptance criteria. In the
33 event that greater than 75 1800TL containers are needed, or a different type of storage container and/or
34 waste type is required to facilitate the scope and objectives of this RAWP, DOE will address such
35 conditions with the Lead Regulatory Agency prior to utilizing different containers or storing waste other
36 than TRU waste.

37 Waste designated as dangerous or mixed waste will be treated, to the extent practical, as appropriate to
38 meet land disposal restrictions and ERDF acceptance criteria, and disposed at ERDF. ERDF is also
39 engineered to meet landfill design standards under WAC 173-303-665, "Landfills." All applicable

¹ CERCLA Section 104(d)(4) states that where two or more noncontiguous facilities are reasonably related on the basis of geography, or on the basis of the threat or potential threat to the public health or welfare or the environment, the facilities can be treated as one for purposes of CERCLA response actions. Consistent with this, the Hanford buildings/structures, the North Outside Storage Area and ERDF would be considered to be "on-site" for purposes of Section 104 of CERCLA, and waste may be transferred between the facilities without requiring a permit. This determination will be made upon issuance of the Action Memorandum(s).